

a control separated from said bearing device and functionally associated with said bearing device to receive the processed signals from said sensor device for controlling said bearing device on the basis of the processed signals.

2. (Amended) An electric discharge gas laser as set forth in claim 1, wherein said signal processor is operable to process the signals delivered from said sensor so as to output the processed signals at a predetermined level of sensitivity of said sensor device.

3. (Amended) An electric discharge gas laser as set forth in claim 2, wherein said signal processor includes a circuit operable to generate and deliver signals indicating a displacement of said rotating shaft from a target position thereof on the basis of the signals delivered from said sensor and a gain controllable amplifier operable to adjust an amplitude of the signals delivered from said circuit.

IN THE ABSTRACT:

Please replace the abstract with the attached substitute abstract.